

Claims

1. A method of stimulating proliferation of a regulatory T cell, comprising contacting the cell with EBI3-p35.
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2. A method according to claim 1 wherein the EBI3-p35 comprises at least two EBI3 components and two p35 components.
3. A method according to claim 2 wherein the EBI-p35 is a
10 heterotetramer consisting of two of each component.
4. A method according to claim 2 or claim 3 wherein at least one EBI3 component and at least one p35 component are covalently linked to one another.
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5. A method according to claim 4 wherein the at least one EBI3 component and the at least one p35 component form a fusion protein.
6. A method according to claim 4 or claim 5 wherein each
20 EBI3 or p35 component is covalently linked to at least one other such component.
7. A method according to any one of claims 1 to 6 wherein
25 the EBI3-p35 further comprises one or more heterologous polypeptides covalently linked to one or more of the EBI3 or p35 components.
8. A method according to wherein two or more said
30 heterologous polypeptides associate with one another to assist in the association between the EBI3 and p35 components.
9. A method according to claim 8 wherein the heterologous polypeptides associate with one another via disulphide bonds.
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10. A method according to claim 9 wherein the heterologous polypeptides are antibody Fc regions including hinge regions.

11. A method according to any one of claims 1 to 10 further comprising contacting the regulatory T cell with a substance capable of stimulating signalling through the cell's T cell receptor.
12. A method of enhancing regulatory T cell activity in a subject, comprising administering EBI3-p35 to that subject.
13. EBI3-p35 for use in a method of medical treatment.
14. Use of EBI3-p35 in the manufacture of a medicament for enhancing regulatory T cell activity in a subject.
15. Use according to claim 14 wherein the medicament is for the treatment of a condition characterised by inappropriate or undesirable T cell activation.
16. Use according to claim 15 wherein the condition is an inflammatory or autoimmune disease.
17. Use according to claim 16 wherein the condition is arthritis (e.g. rheumatoid arthritis), gastritis, pernicious anaemia, thyroiditis, insulinitis, diabetes, sialoadenitis, adrenalitis, orchitis/oophoritis, glomerulonephritis, experimental autoimmune encephalitis, multiple sclerosis, chronic obstructive pulmonary disease, atherosclerosis or inflammatory bowel disease.
18. Use according to claim 15 wherein the medicament is for the prevention or amelioration of allograft rejection.
19. Use according to claim 15 wherein the condition is an allergy.
20. Use according to claim 19 wherein the condition is asthma.

21. An EBI3-p35 molecule comprising an EBI3 component, a p35 component, and a heterologous component, wherein two or more such heterologous components are capable of associating with one another such that two or more such EBI-p35 molecules form a complex.

22. A molecule according to claim 21 wherein the EBI3, p35 and heterologous components form a fusion protein.

23. A molecule according to claim 21 or claim 22 wherein the heterologous components are capable of associating with one another by formation of disulphide bonds.

24. A molecule according to any one of claims 21 to 23 wherein the heterologous component is an antibody Fc domain including the hinge region.

25. EBI3-p35 comprising two EBI3 components and two p35 components.

26. EBI3-p35 according to claim 25 wherein each of the EBI3 and p35 components is covalently linked to at least one other such component.

27. EBI3-p35 according to claim 25 or claim 26 further comprising one or more heterologous components.

28. EBI3-p35 according to claim 27 wherein at least one of each of the EBI3, p35 and heterologous components form a fusion protein.

29. A nucleic acid encoding a fusion protein according to claim 22 or claim 28.

30. An expression vector comprising a nucleic acid according to claim 29.

31. A host cell comprising an expression vector according to claim 30.